

### **AMENDMENTS TO THE CLAIMS**

*The listing of claims will replace all prior versions and listings of claims in the application:*

1. **(Currently Amended)** A method of manufacturing lead frame connectors for use in connecting an optical sub-assembly to a printed circuit board of an optical transceiver module, comprising:

stamping a selected configuration of conductors in a conductive ribbon,  
wherein conductors in the configuration of conductors that correspond to individual lead frame connectors are internally stabilized using a conductive structure prior to singulation;

passing the conductive ribbon through an insert injection molding process to form an insulating casing around the conductors; and

singulating the conductive ribbon into individual lead frame connectors having:

a plurality of electrical contacts that are configured for connection with leads of the optical sub-assembly; and

a plurality of leads that are configured for connection with conductive features on the printed circuit board; and

punching the conductive structure from each individual lead frame connector.

2. **(Currently Amended)** The method as defined in claim 1, wherein the conductors that correspond to an individual lead frame connector are internally stabilized using a conductive structure prior to singulation, the method further comprising punching the conductive structure from the lead frame connector through a hole formed in the insulating casing.

3. (Currently Amended) The method as defined in claim 2, wherein punching the conductive structure from the lead frame connector comprises punching the conductive structure through a hole formed forming the hole in [[an]] the electrically insulating casing formed about the conductors during the insert injection molding process.

4. (Previously Presented) The method as defined in claim 1, wherein passing the conductive ribbon through an insert injection molding process comprises passing the conductive ribbon from one reel to another reel.

5. (Previously Presented) The method as defined in claim 1, further comprising, prior to passing the conductive ribbon through the insert injection molding process, bending the conductors of the conductive ribbon such that the plurality of leads are oriented in a direction that is not parallel to a plane defined by the plurality of electrical contacts.

6. (Previously Presented) The method as defined in claim 1, further comprising connecting an optical sub-assembly to a printed circuit board of an optical transceiver module using the lead frame connector.

7. (Previously Presented) The method as defined in claim 6, wherein connecting the optical sub-assembly to the printed circuit board comprises:

connecting the plurality of electrical contacts of the lead frame connector to corresponding leads of the optical sub-assembly to obtain a combined structure that includes the lead frame connector and the optical sub-assembly; and

connecting the plurality of leads of the lead frame connector to corresponding conductive features on the printed circuit board.

8. (Previously Presented) The method as defined in claim 7, wherein the optical sub-assembly is a transmitter optical sub-assembly.

9. (Previously Presented) The method as defined in claim 7, wherein the optical sub-assembly is a receiver optical sub-assembly.

10. (Previously Presented) The method as defined in claim 1, wherein the selected configuration of conductors is selected to achieve a desired RF response of the lead frame connector when used in the optical transceiver module.

11. (Cancelled)

12. (New) A method of manufacturing lead frame connectors for use in connecting an optical sub-assembly to a printed circuit board of an optical transceiver module, comprising:

stamping a selected configuration of conductors in a conductive ribbon;

passing the conductive ribbon through an insert injection molding process, wherein passing the conductive ribbon through an insert injection molding process comprises passing the conductive ribbon from one reel to another reel; and

singulating the conductive ribbon into individual lead frame connectors having:

a plurality of electrical contacts that are configured for connection with leads of the optical sub-assembly; and

a plurality of leads that are configured for connection with conductive features on the printed circuit board.

13. (New) The method of claim 12, wherein passing the conductive ribbon through an insert injection molding process form an insulating casing around a portion of the selected configuration of conductors, wherein a hole is formed in the insulating casing.

14. (New) The method of claim 13, further comprising punching a conductive feature from the selected configuration of conductors, the conductive feature providing internal stabilization to the selected configuration of conductors during the insert injection molding process.